DA 9863
/ JFW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: PATENAUDE, Francois; DUFOUR, Martial
Serial No.:   09/503,834
Filed: February 15, 2000
Title: NOISE FLOOR LEVEL ESTIMATION
Group: 2863
Examiner: Demetrius R. PRETLOW
Attorney Ref.:   PAT 1952B-2 US

September 22, 2005

Commissioner for Patents
United States Patent and Trademark Office
Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, Virginia
22314, U.S.A.

Attention: Office of Petitions

Dear Sir:

RE-SUBMISSION OF PETITION FOR REVIVAL OF AN APPLICATION FOR PATENT ABANDONED UNINTENTIONALLY UNDER 37 CFR 1.137(b)

On December 17, 2004, applicant submitted a Petition For Revival of an Application for Patent Abandoned Unintentionally Under 37 CFR 1.137(b). Enclosed is a copy of our submission, together with the Auto-Reply Facsimile Transmission received from the United States Patent and Trademark Office.
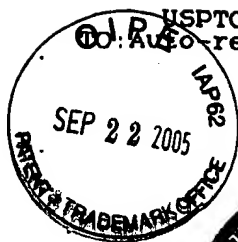
Please advise when we can expect a decision on our Petition to Revive. Thank you.

Respectfully submitted,
Francois PATENAUDE et al.

By: _____
Anne Kinsman
Reg. No. 45,291
Borden Ladner Gervais LLP
100 Queen Street, Suite 1100
Ottawa, ON
Canada K1P 1J9
Tel: (613) 237-5160
Fax: (613) 787-3558
E-mail: ipinfo@blgcanada.com

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DEC 1 7 2004

Borden Ladner Gervals LLP / s.r.l.

Auto-Reply Facsimile Transmission

TO: Fax Sender at +613 7873558

Fax Information
Date Received: 12/17/2004 11:29:03 AM [Eastern Standard Time]
Total Pages: 15 (including cover page)

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PAT 1952B-2 US Pwra /sp.ke

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DEC-17-04 11:31AM FROM-BORDEN LADNER GERVAIS LLP +613-7873558 T-422 P.01 F-712

Borden Ladner Gervais LLP
Lawyers - Patent & Trade-mark Agents
World Exchange Plaza
100 Queen Street, Suite 1100
Ottawa ON K1P 1J9
tel.: (613) 237-5160 fax: (613) 787-3558
toll free: (800) 661-4737
gerk@blgcanada.com
www.blgcanada.com

CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that these papers, consisting of 15 pages total, are being facsimile transmitted to the Patent and Trademark Office 703-872-9306 on the date shown below.

DATE: December 17, 2004
L. Anne Kinsman
Registration No.: 45,291

F A X / T E L E C

TO THE ATTENTION OF:

MAIL STOP:	MAIL STOP PETITION
COMPANY:	United States Patent and Trademark Office
CITY:	Arlington, Virginia, U.S.A.
FAX NUMBER:	703-872-9306
DATE / TIME:	December 17, 2004
FROM:	L. Anne Kinsman
DIRECT DIAL:	(613) 237-5160
OUR FAX NUMBER:	(613) 787-3558

RE: United States Patent Appln No. 09/503,834
Title: NOISE FLOOR LEVEL ESTIMATION
Inventor(s): PATENAUDE, Francois; DUFOUR, Martial
Our File: PAT 1952B-2 US

NUMBER OF PAGES, INCLUDING THIS PAGE: 15
CONFIRMATION TO FOLLOW: NONE

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IF THERE IS A PROBLEM WITH TRANSMISSION OR IF ALL PAGES ARE NOT RECEIVED, PLEASE CALL Angie Armstrong-Baker AT (613) 237-5160.

PAGE 1/15 * RCVD AT 12/17/2004 11:29:03 AM [Eastern Standard Time] * SVR:USPTO-EFXRF-1/2 * DNIS:8729306 * CSID:+613 7873558 * DURATION (mm-ss):04-10

MEMORY TRANSMISSION REPORT

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TIME        : DEC-17-04  11:35AM
TEL NUMBER1 : +613-7873558
TEL NUMBER2 : +
NAME        : BORDEN LADNER GERVAIS LLP
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FILE NUMBER	:	712
DATE	:	DEC-17 11:31AM
TO	:	#109917038729306
DOCUMENT PAGES	:	15
START TIME	:	DEC-17 11:31AM
END TIME	:	DEC-17 11:35AM
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FILE NUMBER	: 712	

*** SUCCESSFUL TX NOTICE ***

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CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that these papers, consisting of 15 pages total, are being facsimile transmitted to the Patent and Trademark Office 703-872-9306 on the date shown below.

DATE: December 17, 2004

L. Anne Kinsman
Registration No.: 45,291

TO THE ATTENTION OF:

MAIL STOP:	MAIL STOP PETITION
COMPANY:	United States Patent and Trademark Office
CITY:	Arlington, Virginia, U.S.A.
FAX NUMBER:	703-872-9306
DATE / TIME:	December 17, 2004
FROM:	L. Anne Kinsman
DIRECT DIAL:	(613) 237-5160
OUR FAX NUMBER:	(613) 787-3558

RE: United States Patent Appln No. 09/503,834
Title: NOISE FLOOR LEVEL ESTIMATION
Inventor(s): PATENAUDE, Francois; DUFOUR, Martial
Our File: PAT 1982B-2 US

NUMBER OF PAGES, INCLUDING THIS PAGE: _____15_____
CONFIRMATION TO FOLLOW: NONE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	PATENAUDE, Francois; DUFOUR, Martial
Serial No.:	09/503,834
Filed:	February 15, 2000
Title:	NOISE FLOOR LEVEL ESTIMATION
Group:	2863
Examiner:	PRETLOW, Demetrius R.
Attorney Ref.:	PAT 1952B-2 US
Customer No.:	23051

December 17, 2004

Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450
U.S.A.

Attention: Mail Stop Petition

PETITION FOR REVIVAL OF AN APPLICATION FOR PATENT ABANDONED UNINTENTIONALLY UNDER 37 CFR 1.137(b)

This is in response to the Notice of Abandonment dated <u>September 17, 2004</u>, a partial copy of which was received in our offices on December 16, 2004.
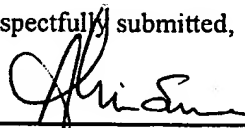
Applicant respectfully submits herewith a true copy of our Amendment, dated May 24, 2004, together with our facsimile transmission page which indicates that the documents were successfully transmitted to the United States Patent and Trademark Office on May 24, 2004. Applicant respectfully requests that the application be revived without any additional fees.

Please acknowledge receipt of this submission.

No fees are believed due. **However, the Commissioner is hereby authorized to charge to Deposit Account Number 501593 any required fees for processing this request.**

Respectfully submitted,

By: _____

L. Anne Kinsman
Reg. No. 45,291

Borden Ladner Gervais LLP
100 Queen Street, Suite 1100
Ottawa, ON, Canada K1P 1J9
Tel: (613) 787-3519
Fax: (613) 787-3558
E-mail: akinsman@blgcanada.com
ALK/
Encls.
1.   Facsimile Transmission Report
2.   Facsimile Cover Page (which includes Certificate of Facsimile Transmission)
3.   Amendment dated May 24, 2004

MEMORY TRANSMISSION REPORT

TIME   : MAY-24-04 17:44
TEL NUMBER1: +613-230-8842
TEL NUMBER2: +
NAME   : BORDEN LADNER GERVAIS LLP

FILE NUMBER   : 989

DATE   : MAY-24 17:42

TO   : #198917038729306

DOCUMENT PAGES   : 12

START TIME   : MAY-24 17:42

END TIME   : MAY-24 17:44

SENT PAGES   : 12

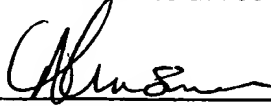FILE NUMBER   : 989   *** SUCCESSFUL TX NOTICE ***

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CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that these papers, consisting of __12__ pages total, are being facsimile transmitted to the U.S. Patent and Trademark Office at 703-872-9306 on the date shown below.

DATE: May 24, 2004

L. Anne Kinsman
Reg. No. 45,291

==

TO THE ATTENTION OF: PRETLOW, Demetrius R.

MAIL STOP: MAIL STOP Amendment

COMPANY: U.S. Patent and Trademark Office

CITY: Arlington VA

FAX NUMBER: 1-703-872-9306

DATE / TIME: May 24, 2004

FROM: Anne Kinsman

DIRECT DIAL: (613) 787-3519

OUR FAX NUMBER: (613) 787-3558

RE: United States Patent Appln No. 09/503,834
Title: NOISE FLOOR LEVEL ESTIMATION
Inventor(s):   PATENAUDE, Francois; DUFOUR, Martial
Our File: PAT 1952B-2 US

NUMBER OF PAGES, INCLUDING THIS PAGE: __12__
CONFIRMATION TO FOLLOW: None

OIPE
SEP 22 2005

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: PATENAUDE, Francois; DUFOUR, Martial
Serial No.:   09/503,834
Filed: February 15, 2000
Title: NOISE FLOOR LEVEL ESTIMATION
Group: 2863
Examiner: PRETLOW, Demetrius R.
Attorney Ref.:   PAT 1952B-2 US
Customer No.:   23051

May 24, 2004

Mail Stop Amendment
Commissioner for Patents
2011 South Park Place
Crystal Plaza Two
Lobby Room 1B03
Arlington, Virginia
22202
U.S.A.

AMENDMENT

Dear Sirs:

In response to the Office Action dated February 24, 2004 please amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of the claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 11 of this paper.

Amendments to the Claims:

This listing of claims will replace all prior version, and listings, of the claims in the application:

Listing of Claims:

1. (currently amended) A method of estimating the noise floor of a <u>continuous</u> wideband analogue signal comprising the steps:

    a. representing the continuous <u>wideband analogue</u> signal as a series of discrete frequency and amplitude values;

    b. creating a histogram based on the discrete frequency and amplitude values <u>by:</u>

        <u>establishing a lowest bin representing the lowest integer value of the discrete series representing the wideband signal,</u>

        <u>establishing a highest bin representing the highest integer value of the discrete series representing the wideband signal,</u>

        <u>establishing bins for each integer value between the lowest and highest bins, and</u>

        <u>incrementing the value of at least one bin when there is an upward or downward crossing of the bin by at least one segment of the series representing the wideband signal; and</u>

    c. deriving a noise floor estimate from characteristics of the histogram.

2. (currently amended) The noise floor estimation method of claim 1 wherein the ~~method of obtaining the series of discrete frequency and amplitude values~~ <u>step of representing the continuous signal</u> includes the steps of:

    a. sampling ~~a~~ <u>the</u> received wideband signal ~~by~~ <u>using</u> a plurality of analogue-to-digital converters to generate a series of output signals;

    b. windowing the output signals of the analogue-to-digital converters;

    c. applying a mathematical transform to the results of the windowing to obtain a series of discrete frequency values;

    d. converting ~~an~~ <u>the</u> amplitude of each discrete frequency value to log-domain representation; and

e.   rounding the log-domain representation of the amplitude for each discrete frequency value to the nearest integer value to generate a discrete amplitude value.

3.   (currently amended)   The noise floor estimation method of claim 2 wherein the step of windowing ~~process~~ includes the steps of:

a.   selecting a discrete valued weighting function;

b.   multiplying the value of each output signal of the series by a corresponding element of the discrete weighting function.

4.   (currently amended)   The noise floor estimation method of claim 2 wherein the mathematical transform ~~used~~ is a ~~Fast~~ discrete Fourier Transform.

5.   (currently amended)   The noise floor estimation method of claim 2 wherein the step of converting the amplitude ~~of each value of the discrete frequency series is converted~~ to log domain representation ~~by~~ includes multiplying 20 by the base 10 logarithm of the magnitude of the ~~element~~ amplitude.

6.   (original)   The noise floor estimation method of claim 2 wherein the log domain representation of the amplitudes results in the amplitudes being expressed as decibel (dB) values.

7.   (original)   The noise floor estimation method of claim 2 wherein the log domain representation of the amplitudes results in the amplitudes being expressed as decibel milliwatt (dBm) values.

8.   (cancelled)

9.   (currently amended)   The noise floor estimation method of claim ~~8~~1 wherein the step of deriving the noise floor estimate from the characteristics of the histogram includes the steps of:

a.   defining the lowest dB bin as a starting point

b.   determining the next lowest valued local maximum on the histogram;

c.   performing a Y test on the determined maximum;

d.   repeating steps b and c until the Y test fails;

e.   setting the noise floor by adding an offset to the dB value of the maximum of the histogram that caused the Y test failure.

10.   (currently amended)   The noise floor estimation method of claim 9 wherein <u>performing</u> the Y test includes the steps of:

a.   examining all points in the next Y dB;

b.   considering the test a pass when a point exists in the next Y dB which has a higher value than the starting point;

c.   considering the test a fail when no point exists in the next Y dB which has a higher value than the starting point.

11.   (original)   The noise floor estimation method of claim 10, wherein Y is 3 dB.

12.   (original)   The noise floor estimation method of claim 9, wherein the offset is determined based on observed characteristics of the signal and the windowing process' discrete weighting function.

13.   (original)   The noise floor estimation method of claim 12, wherein the offset is selected from the group of 2 dB for a rectangular window, 2.75 dB for a Hanning window, 3 dB for a Blackman window, and 3.2 dB for a flat top window.

14.   (currently amended)   <u>A method of estimating the noise floor of a continuous wideband analogue signal comprising</u> ~~The noise floor estimation method of claim 1, wherein the step of creating the histogram includes the~~ steps of:

a.   <u>representing the continuous wideband analogue signal as a series of discrete frequency and amplitude values;</u>

b.   <u>creating a histogram based on the discrete frequency and amplitude values by:</u>

~~a.~~   establishing a lowest bin representing the lowest integer dB value of the discrete series representing the wideband signal;

~~b.~~   establishing a highest bin representing the highest integer dB value of the discrete series representing the wideband signal;

~~c.~~   establishing bins for each integer dB value between the lowest and highest bins so that there are a total of MK bins;

~~d.~~ incrementing the bins for each time an element in the discrete series falls into the bin; and

c. deriving a noise floor estimate from characteristics of the histogram.

15. (currently amended)   The noise floor estimation method of claim 14, wherein the step of deriving the noise floor estimate from the characteristics of the histogram includes the steps of:

a.   sorting the elements of the histogram in decreasing order of amplitude to create a sorted vector;

b.   reducing the size of the sorted linear vector from MK to M by summing groups of K consecutive elements of the sorted linear vector for achieving a more discretised amplitude representation;

c.   applying one of a log-likelihood function, and a quasi log-likelihood function, to the M elements of the sorted linear vector to achieve a discrete function L(k);

d.   subtracting L(k) from a multiple (C) of a discrete penalty function p(k) to obtain the function $-L(k) + C\,p(k)$;

e.   identifying the index, denoted by q_{NF}, at which the minimum of the $-L(k) + C\,p(k)$ equation is achieved; and

f.   computing the noise floor level estimate per ~~FFT~~ bin by dividing the mean of the $M - q_{NF} - 1$ smallest values of the M sorted vector by K.

16. (original)   The noise floor estimation method of claim 15, wherein M is considerably larger than K.

17. (original)   The noise floor estimation method of claim 16, wherein M = 64.

18. (original)   The noise floor estimation method of claim 16, wherein K=8.

19.   (original)   The noise floor estimation method of claim 15 wherein

$$L(k) = K \ln\left[\frac{\prod\limits_{i=k+1}^{M} l_i}{\left(\dfrac{1}{M-k}\sum\limits_{i=k+1}^{M} l_i\right)^{M-k}}\right]$$

L(k) is represented by the quasi-log-likelihood function   , where
k is the index of the function.

20.   (original)   The noise floor estimation method of claim 15, wherein
the penalty function is a polynomial.

21.   (original)   The noise floor estimation method of claim 15, wherein
the penalty function is represented by the second order polynomial function

$$p(k) = \left[3.76\left(\frac{M-1-k}{M-1}\right)^2 + 1.43\left(\frac{M-1-k}{M-1}\right)\right]MK$$

22.   (original)   The noise floor estimation method of claim 15, wherein
the constant C is -2.6.

23.   (currently amended)   A wideband analogue signal noise floor estimation
apparatus comprising:

a.   a digitizer module for creating a discrete series representation of the a
continuous wide band analogue signal, the representation comprised of discrete
frequency and amplitude values;

b.   a histogram module for generating a histogram based on the discrete
frequency and amplitude values; the histogram module including
        a low bin establishing element for creating a low valued bin to represent the integer
        value of lowest valued element in the discrete series representing the wideband
        signal,
        a high bin establishing element for creating a high valued bin to represent the
        integer value of the highest valued element in the discrete series representing the
        wideband signal,
        a tertiary bin creation element for creating bins for each integer value between the
        lowest and highest bins, and

<u>a bin count incrementing element for incrementing a value of a bin when there is</u> <u>an upward or downward crossing of the bin by at least a segment of the discrete</u> <u>series; and</u>

c.   an estimation module for deriving an estimate of the noise floor of the wideband signal based on the characteristics of the histogram.

24.   (original)   The noise floor estimation apparatus of claim 23, wherein the digitizer module further comprises:

a.   a sampling module including a plurality of analogue-to-digital converters for generating a series of output signals;

b.   a windowing module for weighing the output signals of the sampling element to generate weighed output signals;

c.   a transforming module for applying a mathematical transform to the weighed output signals to create a signal comprised of discrete frequency values that represent the original signal;

d.   an amplitude domain converter for converting the linear amplitude values to log-domain representation; and

e.   an amplitude discretizing module for representing the output of the amplitude domain conversion element as a sequence of integer valued amplitude levels.

25.   (original)   The noise floor estimation apparatus of claim 24, wherein the windowing module further includes a weighting element for multiplying each value of the output series by a corresponding element of a preselected discrete valued weighting function.

26.   (original)   The noise floor estimation apparatus of claim 24, wherein the transforming module applies a Fast Fourier Transform.

27.   (original)   The noise floor estimation apparatus of claim 24, wherein the amplitude discretizing module is constructed to convert each amplitude value of the discrete frequency series to 20 times base 10 logarithm of the magnitude of the value.

28.   (original)   The noise floor estimation apparatus of claim 24, wherein the amplitude domain converter outputs amplitude values as decibel (dB) values.

29.   (original)   The noise floor estimation apparatus of claim 24, wherein the amplitude domain converter outputs amplitude values as decibel milliwatt (dBm) values.

30.   (cancelled)

31.   (original)   The noise floor estimation apparatus of claim 23, wherein the estimation module further includes:

      a.   a maxima finding element for finding the next left most maximum from a given starting point, that in the absence of previous data takes the lowest dB bin as a starting point;

      b.   a Y test element for performing a Y test;

      c.   a decision element for calling upon the maxima finding element until the Y test element reports a fail; and

      d.   a noise floor setting element for providing a noise floor estimate by adding an offset to the dB value reported by the maxima finding element that caused the Y test element to report a fail.

32.   (original)   The noise floor estimation apparatus of claim 31, wherein the Y test element further includes:

      a.   an examination element for searching the Y dB to the right of the given starting point for a value higher than the starting point; and

      b.   a reporting element for reporting a fail when no point exists in the next Y dB that has a higher value than the starting point and reports a pass if there is a value in the next Y dB that is greater in value than the starting point.

33.   (original)   The noise floor estimation apparatus of claim 32, wherein Y is set at 3 dB.

34.   (original)   The noise floor estimation apparatus of claim 31, wherein the offset used by the noise floor setting element is based on observed characteristics of the signal and the windowing process' discrete weighting function.

35.   (original)   The noise floor estimation apparatus of claim 34, wherein the offset is selected from the group of 2 dB for a rectangular window, 2.75 dB for a Hanning window, 3 dB for a Blackman window, and 3.2 dB for a flat top window.

36.   (currently amended)   A wideband analogue signal noise floor estimation apparatus comprising: ~~The noise floor estimation apparatus of claim 23, wherein the histogram module further includes:~~

    a.   <u>a digitizer module for creating a discrete series representation of a continuous wide band analogue signal, the representation comprised of discrete frequency and amplitude values;</u>

    b.   <u>a histogram module for generating a histogram based on the discrete frequency and amplitude values, the histogram module including</u>

    ~~a.~~   a low bin establishing element for creating a low valued bin to represent the lowest integer dB values of the discrete series representing the wideband signal;

    ~~b.~~   a high bin establishing element for creating a high valued bin to represent the highest integer dB value of the discrete series representing the wideband signal;

    ~~c.~~   a tertiary bin creation element for creating bins for each integer dB value between the lowest and highest bins; and

    ~~d.~~   a bin count incrementing element for incrementing the value of a bin for each time an element in the discrete series falls into the bin.

37.   (original)   The noise floor estimation apparatus of claim 23, wherein the estimation module further includes:

    a.   a sorting element for creating a vector containing the discrete amplitudes of the input signal in decreasing order;

    b.   a vector size reducing element for reducing the size of the sorted linear vector from MK elements to M elements by summing groups of K consecutive elements of the sorted linear vector to achieve a more discretised amplitude representation;

    c.   a log-likelihood element for applying a log-likelihood, or a quasi log-likelihood function, to the M elements of the sorted linear vector output from the vector reducing element to achieve a discrete function L(k);

    d.   a penalty function element for subtracting the discrete function L(k) from a multiple (C) of a discrete penalty function p(k) to obtain the function $-L(k) + C\,p(k)$ (PLLM function);

e.   an index identification element for identifying the index at which the minimum of the PLLM function, $-L(k)+Cp(k)$, is achieved and identifying the index, denoted by q_{NF}, at which the minimum of the $-L(k)+Cp(k)$ equation is achieved; and

f.   a noise floor setting element for providing a noise floor estimate by dividing the mean of the $M-q_{NF}-1$ smallest values of the M sorted vector by K.

38.   (original)   The noise floor estimation apparatus of claim 37, wherein the penalty function element is constructed to apply a polynomial as the penalty function.

39.   (original)   The noise floor estimation apparatus of claim 37, wherein the penalty function element is constructed to apply the second order polynomial function

$$p(k)=\left[3.76\left(\frac{M-1-k}{M-1}\right)^2+1.43\left(\frac{M-1-k}{M-1}\right)\right]MK$$ as the penalty function.

Remarks/Arguments

Applicant requests that the application be amended as above described. Claims 1-5, 9, 10, 14, 15, 23 and 36 have been amended. Claims 8 and 30 have been cancelled. Claims 1-7, 9-29 and 31-39 are currently pending in the application. No new claims have been added.

In the Office Action dated February 24, 2004, the Examiner rejected claims 1 and 23 under 35 U.S.C. 102(a) as being anticipated by U.S. Patent No. 6,240,282 to Kleider et al. The Applicant thanks the Examiner for finding claims 2-22 and 24-39 allowable if rewritten in independent form to include all the limitations of the base claim and any intervening claims. Accordingly, claim 1 has been amended to include the subject matter recited in cancelled claim 8; claim 14 has been rewritten independent form; claim 23 has been amended to include the subject matter of cancelled claim 30; and claim 36 has been rewritten in independent form. No new matter has been added, though Applicant has recited an "upward and downward crossing", as opposed to a "positive slope", as supported at p. 10, line 28 of the application as filed. Applicant submits that nothing in Kleider et al. teaches or suggests incrementing a bin value in response to an upward or downward crossing, or falling into, the bin of a series segment. Therefore, Applicant submits that amended claims 1, 14, 23 and 36 are clearly distinguished from Kleider et al., and withdrawal of the Examiner's rejection under 35 U.S.C. 102(a) is respectfully requested.
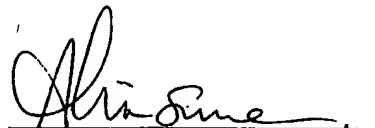
Claims 2 - 5, 9, 10 and 15 have been amended to accord with the changes to claims 1 and 14, and to provide proper antecedent basis for all elements.

Therefore, Applicant submits that the application is now in condition for allowance, and favourable action to that end is respectfully requested.

BORDEN LADNER GERVAIS, LLP
World Exchange Plaza
100 Queen Street, Suite 1100
Ottawa ON K1P 1J9
Canada

Telephone No. (613) 787-3519
Facsimile No. (613) 787-3558
E-mail: akinsman@blgcanada.com

Respectfully submitted,
PATENAUDE, Francois, et al.

By: L. Anne Kinsman
Registration No. 45,291

Notice of Abandonment	**Application No.**	**Applicant(s)**
	09/503,834	PATENADE, FRANCOIS
	Examiner	**Art Unit**
	Demetrius R. Pretlow	2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

This application is abandoned in view of:

1. ☒ Applicant's failure to timely file a proper reply to the Office letter mailed on <u>24 February 2004</u>.

   (a) ☐ A reply was received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the period for reply (including a total extension of time of _____ month(s)) which expired on _____.

   (b) ☐ A proposed reply was received on _____, but it does not constitute a proper reply under 37 CFR 1.113 (a) to the final rejection.

   (A proper reply under 37 CFR 1.113 to a final rejection consists only of: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114).

   (c) ☐ A reply was received on _____ but it does not constitute a proper reply, or a bona fide attempt at a proper reply, to the non-final rejection. See 37 CFR 1.85(a) and 1.111. (See explanation in box 7 below).

   (d) ☒ No reply has been received.

2. ☐ Applicant's failure to timely pay the required issue fee and publication fee, if applicable, within the statutory period of three months from the mailing date of the Notice of Allowance (PTOL-85).

   (a) ☐ The issue fee and publication fee, if applicable, was received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the statutory period for payment of the issue fee (and publication fee) set in the Notice of Allowance (PTOL-85).

   (b) ☐ The submitted fee of $_____ is insufficient. A balance of $_____ is due.

   The issue fee required by 37 CFR 1.18 is $_____. The publication fee, if required by 37 CFR 1.18(d), is $_____.

   (c) ☐ The issue fee and publication fee, if applicable, has not been received.

3. ☐ Applicant's failure to timely file corrected drawings as required by, and within the three-month period set in, the Notice of Allowability (PTO-37).

   (a) ☐ Proposed corrected drawings were received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the period for reply.

   (b) ☐ No corrected drawings have been received.

4. ☐ The letter of express abandonment which is signed by the attorney or agent of record, the assignee of the entire interest, or all of the applicants.

5. ☐ The letter of express abandonment which is signed by an attorney or agent (acting in a representative capacity under 37 CFR 1.34(a)) upon the filing of a continuing application.

6. ☐ The decision by the Board of Patent Appeals and Interference rendered on _____ and because the period for seeking court review of the decision has expired and there are no allowed claims.

7. ☐ The reason(s) below:

John Barlow
Supervisory Patent Examiner
Technology Center 2800

9/17/04

Petitions to revive under 37 CFR 1.137(a) or (b), or requests to withdraw the holding of abandonment under 37 CFR 1.181, should be promptly filed to minimize any negative effects on patent term.

U.S. Patent and Trademark Office
PTOL-1432 (Rev. 04-01)   Notice of Abandonment   Part of Paper No. 20040917

ALK

TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application Number	09/503,834
Filing Date	February 15, 2000
First Named Inventor	Francois PATENAUDE et al.
Art Unit	2863
Examiner Name	Demetrius R. PRETLOW
Attorney Docket Number	PAT 1952B-2

Total Number of Pages In This Submission: 19

ENCLOSURES   *(Check all that apply)*

- [ ] Fee Transmittal Form
  - [ ] Fee Attached
- [ ] Amendment/Reply
  - [ ] After Final
  - [ ] Affidavits/declaration(s)
- [ ] Extension of Time Request
- [ ] Express Abandonment Request
- [ ] Information Disclosure Statement
- [ ] Certified Copy of Priority Document(s)
- [ ] Reply to Missing Parts/ Incomplete Application
  - [ ] Reply to Missing Parts under 37 CFR 1.52 or 1.53

- [ ] Drawing(s)
- [ ] Licensing-related Papers
- [x] Petition
- [ ] Petition to Convert to a Provisional Application
- [ ] Power of Attorney, Revocation Change of Correspondence Address
- [ ] Terminal Disclaimer
- [ ] Request for Refund
- [ ] CD, Number of CD(s) _____
  - [ ] Landscape Table on CD

- [ ] After Allowance Communication to TC
- [ ] Appeal Communication to Board of Appeals and Interferences
- [ ] Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
- [ ] Proprietary Information
- [ ] Status Letter
- [x] Other Enclosure(s) (please identify below):
  1. Re-Submission of Petition to Revive
  2. Copy of Petition to Revive submitted on December 17, 2004

Remarks
Attention: Office of Petitions

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	Borden Ladner Gervais LLP
Signature	*[signature]*
Printed name	Anne Kinsman
Date	September 22, 2005
Reg. No.	15,291

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

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Typed or printed name		Date	